ABSTRACT

The present invention narrows down the compression parameters using the conditions at image capturing of the image data, and executes trial compression using these compression parameters. The "statistical relationship between the compression parameters and the code volume" are prepared with limiting the image capturing conditions, and these statistical relationships are selectively used according to the image capturing conditions of the compression target, so as to estimate the compression parameters accurately. Also estimation error correction processing is determined for each image capturing condition, and these correction processings are selectively used according to the image capturing conditions of the compression target. Also the standard code volume allocation distributions (e.g. quantization table before scale factor multiplication) of the frequency domain for each image capturing condition are provided based on a subjective evaluation, and are selectively used according to the image capturing conditions of the compression target.